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# The Death of Facilities-based Competition

Broadband-oriented Policy Changes  
Risk elimination of Choice for Small  
and Medium Enterprise (SME)  
Customers

Allegiance Telecom, January 29, 2003



# Dispelling The Myth

Myth: TelCos will not invest in broadband unless unbundling Obligations are lifted

Telco Investment 101

- Cost: Capital & Expense
- Benefit: Savings & New Revenues
- Results: NPV, DPP, IRR, Risk/Sensitivity Analysis
- Primary Driver: Expense Reduction

Reality: TelCos *\*will\** Invest in Broadband (without added incentives) because it reduces Operating expenses



# Dispelling The Myth

## Illustration: 10,000 line Service Arrangement

- Individual Copper loops
  - 10,000 Feeder, Distribution, and Drop wire segments
  - Multiple splice Points + Serving Area Interface cross-connects
  - Thousands of Annual Trouble Reports / Maintenance Actions
- Next Generation-Digital Loop Carrier
  - 5 Carrier Serving Areas / 5 TR-303 systems
  - 20 fibers from CO to Hut displaces 10000 Feeder segments
  - Distribution and Drop Wire remain
  - Major Reduction in Maintenance Actions
- Fiber-To-The-Curb/Passive Optical Network
  - Feeder & Distribution segments displaced by fiber and electronics
  - Copper Drop Wire remains
  - Even Greater Reduction in Maintenance Actions & Power Expense



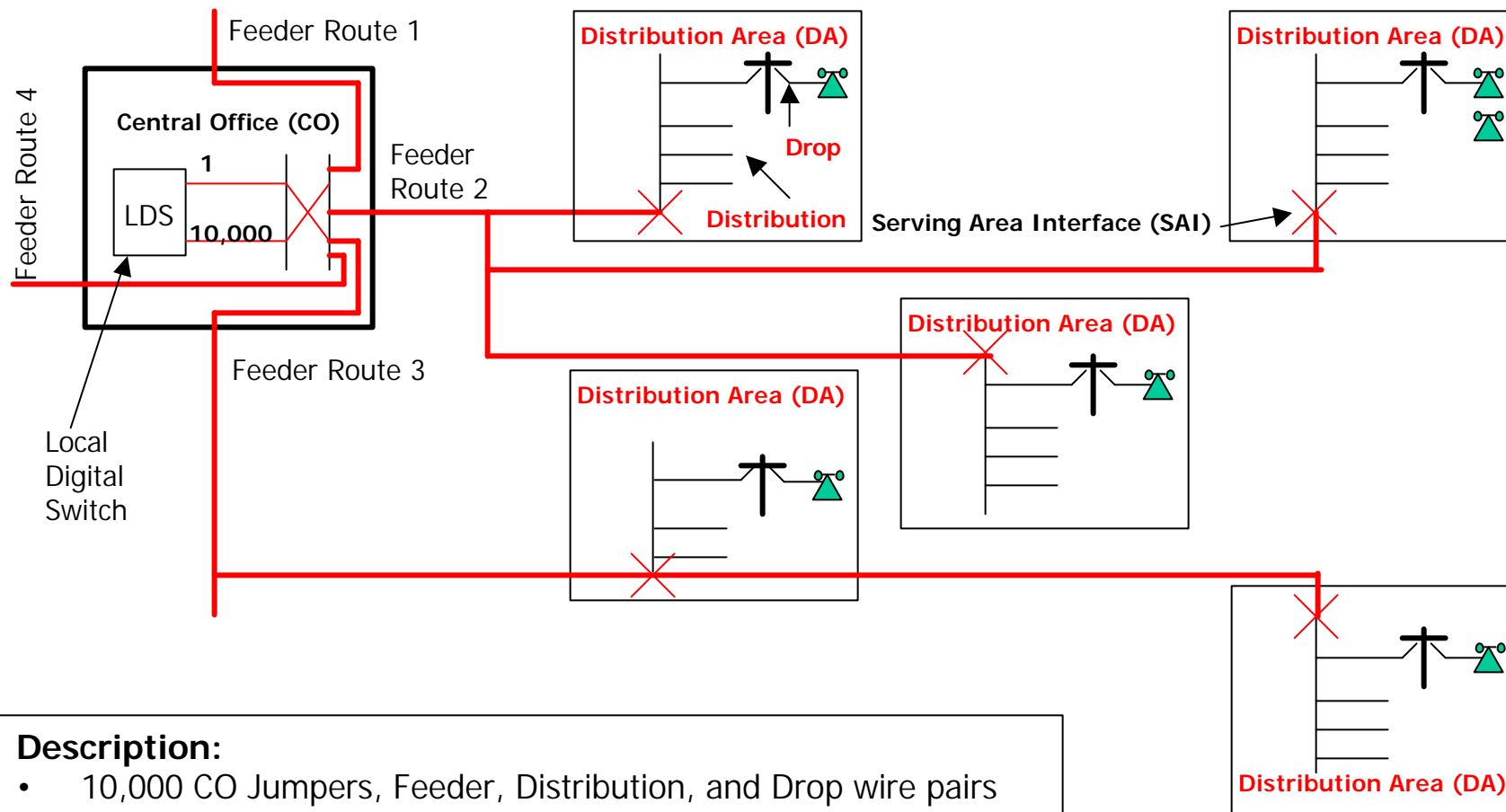
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# Dispelling The Myth

## Illustration: Copper Service Arrangement

**Key:**

- CO: Central Office
- LDS: Local Digital Switch
- DA: Distribution Area
- SAI: Serving Area Interface



**Description:**

- 10,000 CO Jumpers, Feeder, Distribution, and Drop wire pairs
- Multiple splice Points + SAI cross-connects
- Thousands of Trouble Reports / Maintenance Actions Annually

4  
Fiber — Copper



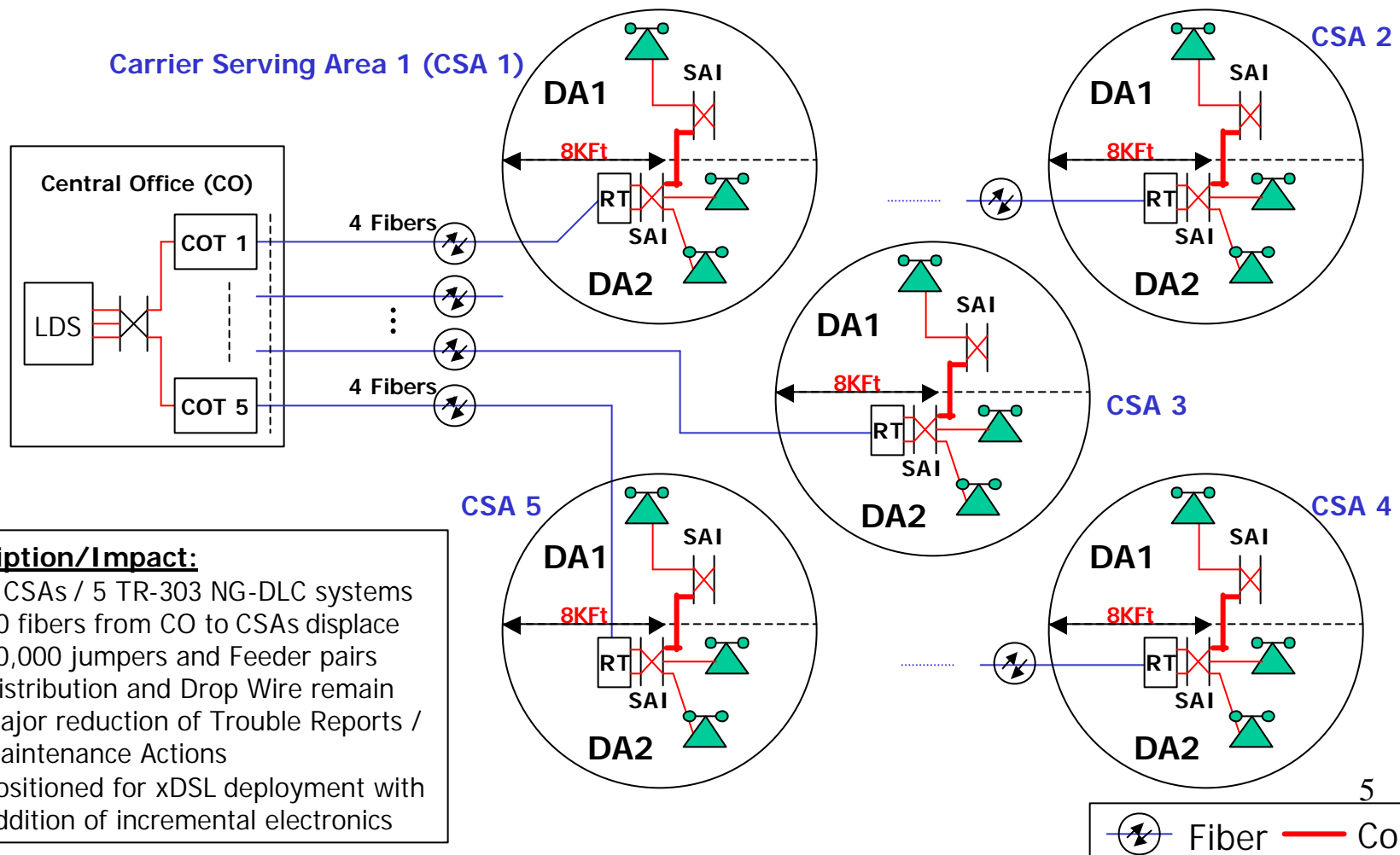
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# Dispelling The Myth

## Illustration: Next Generation Digital Loop Carrier

### Key:

- CSA: Carrier Serving Area
- LDS: Local Digital Switch
- COT: Central Office Terminal
- RT: Remote Terminal
- DA: Distribution Area
- SAI: Serving Area Interface

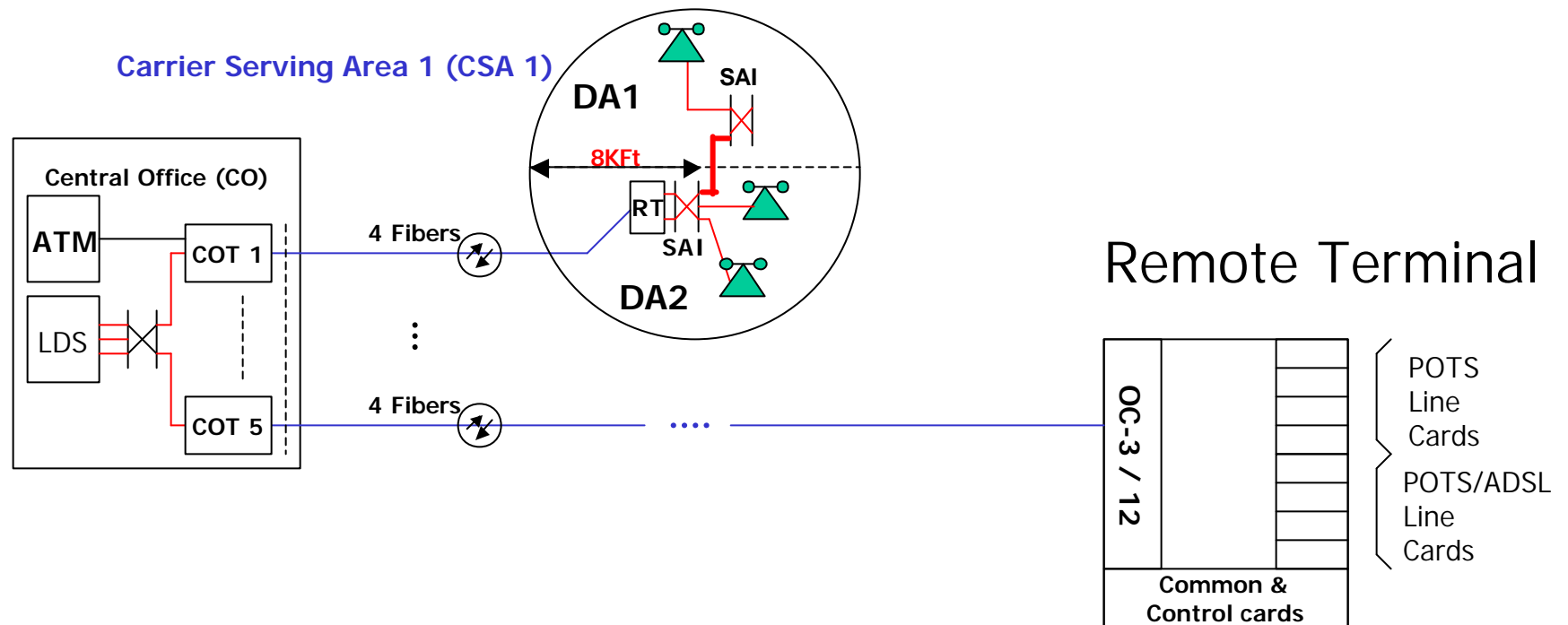


# Dispelling The Myth

## Illustration: Deploying xDSL with NG-DLC

**Key:**

- CSA: Carrier Serving Area
- LDS: Local Digital Switch
- COT: Central Office Terminal
- RT: Remote Terminal
- DA: Distribution Area
- SAI: Serving Area Interface



**Incremental Requirements for xDSL Service:**

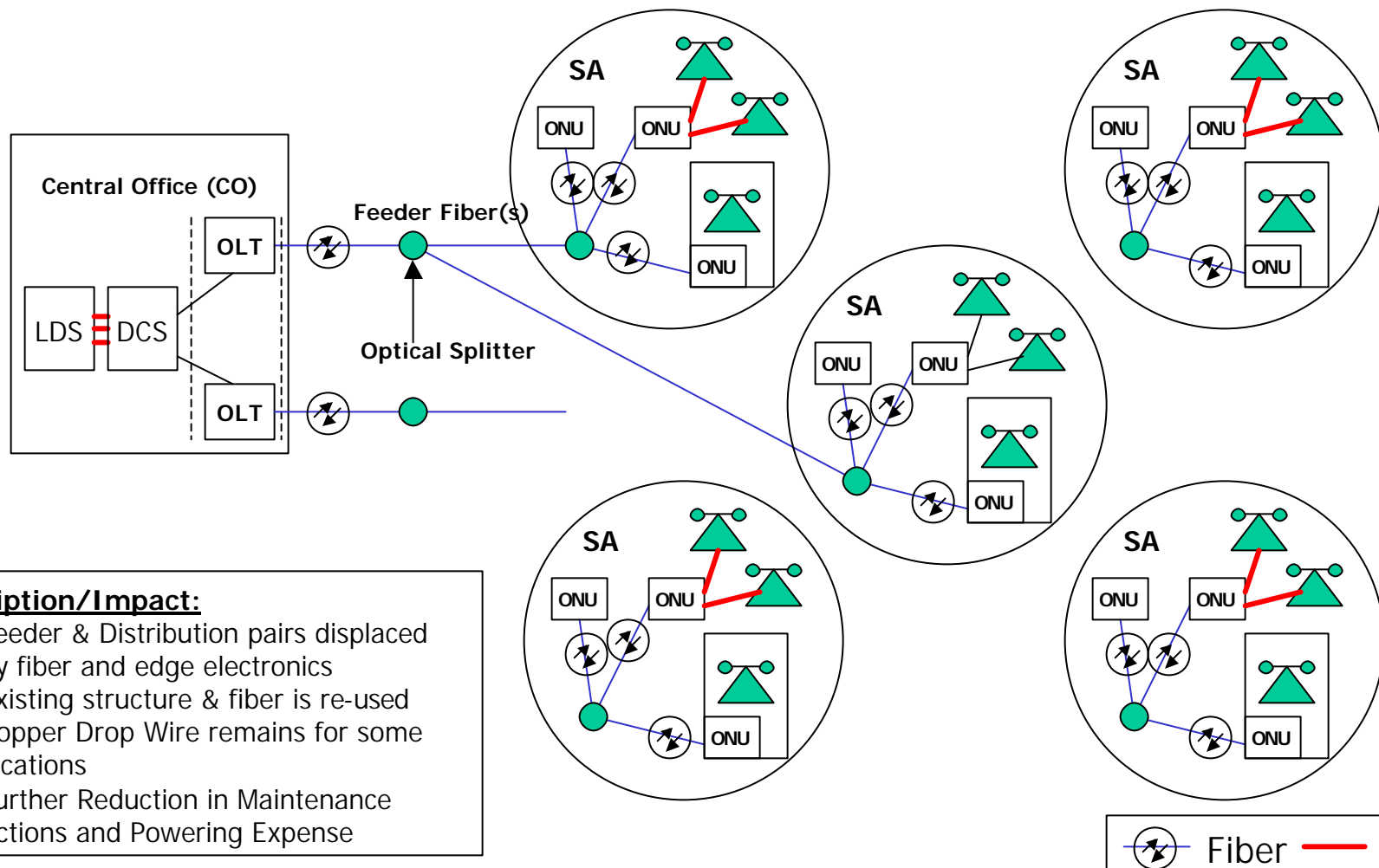
- ATM Switch (OCD) in Central Office
- Integrated DSLAM/xDSL Line Card @ Remote Terminal

# Dispelling The Myth

## Illustration: FTTC/BPON

**Key:**

- FTTC: Fiber-To-The-Curb
- BPON: Business Passive Optical Network
- OLT: Optical Line Terminal
- DCS: Digital Cross-Connect System
- SA: Optical Serving Area
- LDS: Local Digital Switch
- ONU: Optical Network Unit





# Dispelling The Myth

Myth: TelCos will not invest in broadband unless unbundling Obligations are lifted

- SBC Quotes from Pronto Press Release:

"The network efficiency improvements alone will pay for this initiative, leaving SBC with a data network that will be second to none in its ability to satisfy the exploding demand for broadband services."

"in fact, the efficiencies SBC expects to gain will pay for the cost of the deployment on an NPV basis. These efficiencies are conservatively targeted to yield annual savings of about \$1.5 billion by 2004 (\$850 million in cash operating expense and \$600 million in capital expenditures)"